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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,348	07/18/2003	Michael J. Yanutola	0-010266/USSF (OSI0019/US)	5027
7590	04/28/2005		EXAMINER	
Omnova Solutions Inc. 175 Ghent Road Fairlawn, OH 44333-3300			HUANG, MEI QI	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 04/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/623,348

Applicant(s)

YANUTOLA ET AL.

Examiner

Mei Q. Huang

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06/01/2004
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of the group I, claims 1-12 and 20, wherein the elected species for the thickener is sodium polyacrylate, in the reply filed on April 15, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The restriction set forth by the examiner in the Requirement for Restriction/Election dated March 17, 2005 is deemed proper and is therefore made final.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites the limitation "the dried composition" in line 22. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 1713

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lomasney (US Pat. 5,091,447) in view of Gibbs (US Pat. 4,255,306).

The prior art to Lomasney relates to a liquid polymer coating composition, which is easily removable, reliably adheres to the surface of vessels that contain hazardous materials (column 1, line 66-68). Lomasney's coating composition comprises polymer, such as polyvinylidene chloride (column 5, line 40), release agent (column 6, line 57) and thickener (column 9, line 31). The difference between the prior art and the instant application is that Lomasney's polymer is not pre-crosslinked.

The prior art to Gibbs discloses a crosslinked vinylidene chloride polymer comprising vinylidene chloride and a copolymerizable ethylenically unsaturated comonomer (Abstract), which meet the instantly claimed monofunctional monomer, and copolymerizable crosslinking polyfunctional comonomer (Abstract), which meets the instantly claimed multifunctional pre-crosslinking monomer containing at least two reactive groups. Gibbs teaches that such coatings are characterized by significantly enhanced adhesion to polyester film substrate as compared to conventional, non-

Art Unit: 1713

crosslinked vinylidene chloride polymer coating materials. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the non-crosslinked polymer in Lomasney's coating composition with Gibbs's crosslinked copolymer in order to enhance the adhesion of the coating as taught by Gibbs.

As to Claim 2, Lomasney includes antioxidant (column 8, line 61) to decrease the oxidation and deterioration but does not teach the stability as required by instant claim 2. However, given the substantial identity in the composition between the prior art and the present invention, as discussed above, it is the examiner's position to believe that the prior art composition must inherently possess the same stability. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to the applicant to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977).

As to Claim 3, Lomasney teaches that the thickener is comprised in an amount of about 0.1-20 wt% (column 9, line 40).

As to Claims 4-5, Lomasney disclose sodium polyacrylate as a thickener at column 9, line 35.

As to Claim 6, Lomasney does not disclose the composition's weight gain in toluene as required by instant claim 6. However, given the substantial identity in the composition between the prior art and the present invention, as discussed above, it is the examiner's position to believe that the prior art composition must inherently possess the same weight gain in toluene. Since the PTO does not have proper means to

Art Unit: 1713

conduct experiments, the burden of proof is now shifted to the applicant to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977).

As to Claim 7, Gibbs's crosslinked copolymer comprises 0.1-10 wt% of crosslinking bi- or polyfunctional monomer (Abstract).

As to Claims 8-9, Gibbs also includes copolymerizable ethylenically unsaturated comonomer selected from the group consisting of alkyl esters of acrylic acid and methacrylic acid (column 2, line 27-30), which reads on the instantly claimed vinyl acetate and butyl acrylate. Lomasney's sodium polyacrylate thickener defined at column 9, line 35, reads on the instantly claimed polyacrylate thickener and release agent, such as polydimethylsiloxane, disclosed at column 6, line 67, reads on the instant claim 9.

As to Claim 10, Lomasney's coating formulation comprises, to 100 parts of polymer, 1-5 wt% of release agent (column 7, line 3-4), and 0.1-20 wt% of thickener (column 9, line 40), such as sodium polyacrylate (column 9, line 36).

As to Claim 11, the rejection made for Claim 1 described previously in this Office Action would be applied herein to reject Claim 11.

As to Claim 12, the rejection made for Claim 5 described previously in this Office Action would be applied herein to reject Claim 12.

As to Claim 20, Lomasney's teaching of spraying, rolling, or brushing the liquid coating composition onto a surface and allowing the composition to dry to form a continuous, elastomeric membrane meets the instant claim 20.

**Conclusion**

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure. The following references have been cited to show the state of the art with respect to the study of pre-crosslinked polymer used in adhesion area.

US Patent 3,562,235 to Ryan

US Patent 6,635,690 to Heilmann et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mei Q. Huang whose telephone number is (571) 272-3549. The examiner can normally be reached on 8am - 4pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mei Q. Huang  
Examiner

April 25, 2005

  
DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700